

www.phoronix-test-suite.com

gametest3

Intel Core i7-4770K testing with a ASUS MAXIMUS VI IMPACT and MSI AMD Radeon HD 7900 3072MB on Arch rolling via the Phoronix Test Suite.

Automated Executive Summary

mesa 02-12 amd-staging 4.11 had the most wins, coming in first place for 77% of the tests.

Based on the geometric mean of all complete results, the fastest (mesa 02-12 amd-staging 4.11) was 1.035x the speed of the slowest (mesa 19-11 amd-staging 4.14). mesa 19-11 amd-staging 4.11 was 0.994x the speed of mesa 02-12 amd-staging 4.11, mesa 02-12 amd-staging 4.14 was 0.976x the speed of mesa 19-11 amd-staging 4.11, mesa 19-11 amd-staging 4.14 was 0.996x the speed of mesa 02-12 amd-staging 4.14.

Test Systems:

mesa 19-11 amd-staging 4.14

Processor: Intel Core i7-4770K @ 4.40GHz (4 Cores / 8 Threads), Motherboard: ASUS MAXIMUS VI IMPACT, Chipset:

Intel 4th Gen Core DRAM, Memory: 16384MB, Disk: 2 x 128GB Samsung SSD 840 + 640GB Seagate ST3640323AS, Graphics: MSI AMD Radeon HD 7900 3072MB, Audio: Realtek ALC1150, Monitor: ASUS VG23A, Network: Intel Connection I217-V + Qualcomm Atheros AR93xx Wireless

OS: Arch rolling, Kernel: 4.14.0-2-amd-staging-drm-next-git (x86_64), Desktop: Deepin Desktop Environment, OpenGL: 4.5 Mesa 17.4.0-devel (git-ae44845aff) (LLVM 6.0.0), Vulkan: 1.0.61, Compiler: GCC 7.2.0 + Clang 6.0.0 (SVN 318625) + LLVM 6.0.0svn, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: amdgpu.si_support=1
Processor Notes: Scaling Governor: intel_pstate powersave
Graphics Notes: GLAMOR

mesa 19-11 amd-staging 4.11

Processor: Intel Core i7-4770K @ 4.40GHz (4 Cores / 8 Threads), Motherboard: ASUS MAXIMUS VI IMPACT, Chipset: Intel 4th Gen Core DRAM, Memory: 16384MB, Disk: 2 x 128GB Samsung SSD 840 + 640GB Seagate ST3640323AS, Graphics: MSI AMD Radeon HD 7900 3072MB, Audio: Realtek ALC1150, Monitor: ASUS VG23A, Network: Intel Connection I217-V + Qualcomm Atheros AR93xx Wireless

OS: Arch rolling, Kernel: 4.11.0-1-amd-staging (x86_64), Desktop: Deepin Desktop Environment, OpenGL: 4.5 Mesa 17.4.0-devel (git-ae44845aff) (LLVM 6.0.0), Vulkan: 1.0.61, Compiler: GCC 7.2.0 + Clang 6.0.0 (SVN 318625) + LLVM 6.0.0svn, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: radeon.si_support=0 amdgpu.si_support=1
Processor Notes: Scaling Governor: intel_pstate powersave
Graphics Notes: GLAMOR

mesa 02-12 amd-staging 4.14

Processor: Intel Core i7-4770K @ 4.40GHz (4 Cores / 8 Threads), Motherboard: ASUS MAXIMUS VI IMPACT, Chipset: Intel 4th Gen Core DRAM, Memory: 16384MB, Disk: 2 x 128GB Samsung SSD 840 + 640GB Seagate ST3640323AS, Graphics: MSI AMD Radeon HD 7900 3072MB, Audio: Realtek ALC1150, Monitor: ASUS VG23A, Network: Intel Connection I217-V + Qualcomm Atheros AR93xx Wireless

OS: Arch rolling, Kernel: 4.14.0-2-amd-staging-drm-next-git (x86_64), Desktop: Deepin Desktop Environment, OpenGL: 4.5 Mesa 17.4.0-devel (git-fc033742d2) (LLVM 6.0.0), Vulkan: 1.0.61, Compiler: GCC 7.2.1 20171128 + Clang 6.0.0 (SVN 319529) + LLVM 6.0.0svn, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: amdgpu.si_support=1
Processor Notes: Scaling Governor: intel_pstate performance
Graphics Notes: GLAMOR

mesa 02-12 amd-staging 4.11

Processor: Intel Core i7-4770K @ 4.40GHz (4 Cores / 8 Threads), Motherboard: ASUS MAXIMUS VI IMPACT, Chipset: Intel 4th Gen Core DRAM, Memory: 16384MB, Disk: 2 x 128GB Samsung SSD 840 + 640GB Seagate ST3640323AS, Graphics: MSI AMD Radeon HD 7900 3072MB, Audio: Realtek ALC1150, Monitor: ASUS VG23A, Network: Intel Connection I217-V + Qualcomm Atheros AR93xx Wireless

OS: Arch rolling, Kernel: 4.11.0-1-amd-staging (x86_64), Desktop: Deepin Desktop Environment, OpenGL: 4.5 Mesa 17.4.0-devel (git-fc033742d2) (LLVM 6.0.0), Vulkan: 1.0.61, Compiler: GCC 7.2.1 20171128 + Clang 6.0.0 (SVN 319529) + LLVM 6.0.0svn, File-System: ext4, Screen Resolution: 1920x1080

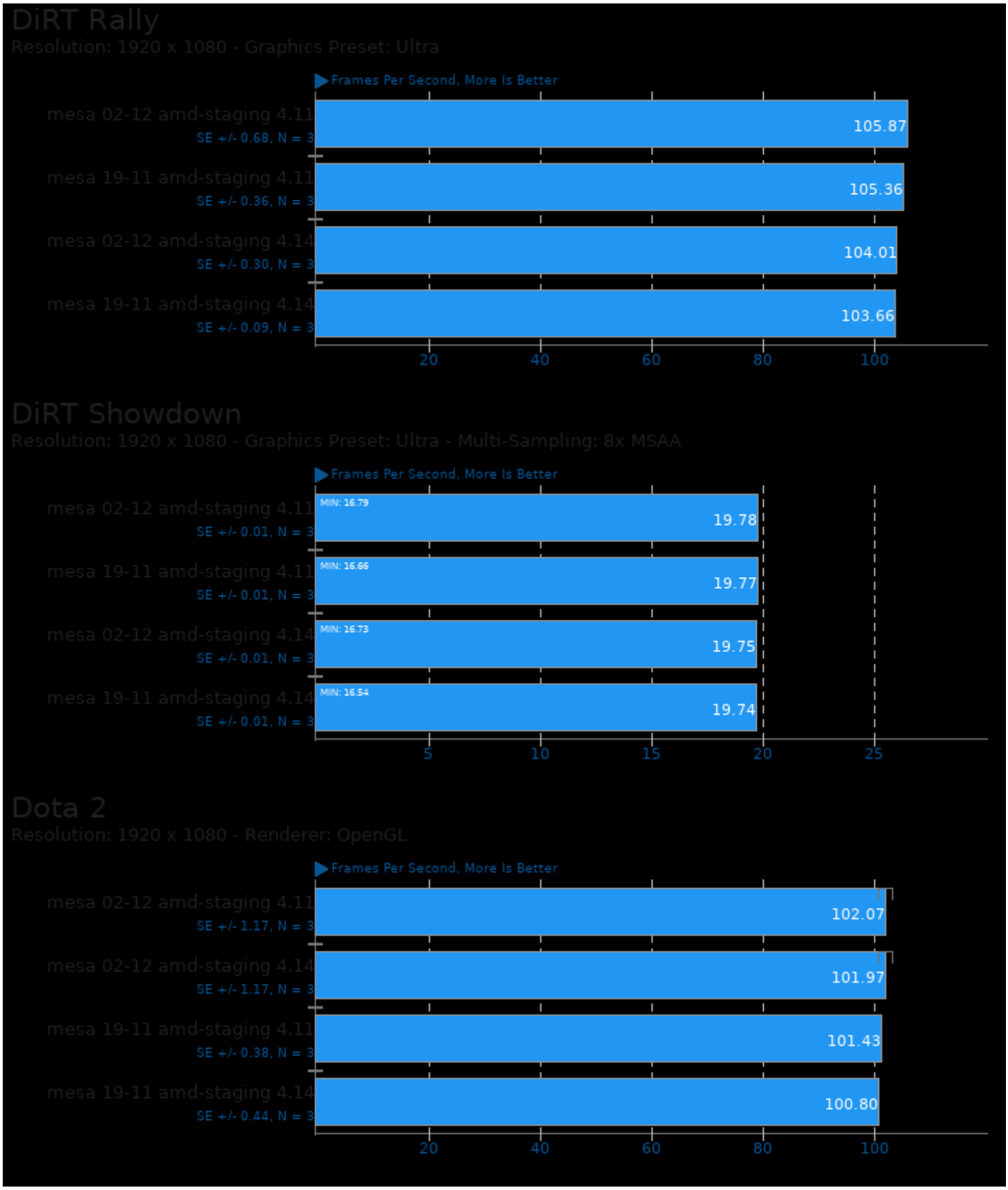
Kernel Notes: radeon.si_support=0 amdgpu.si_support=1

gametest3

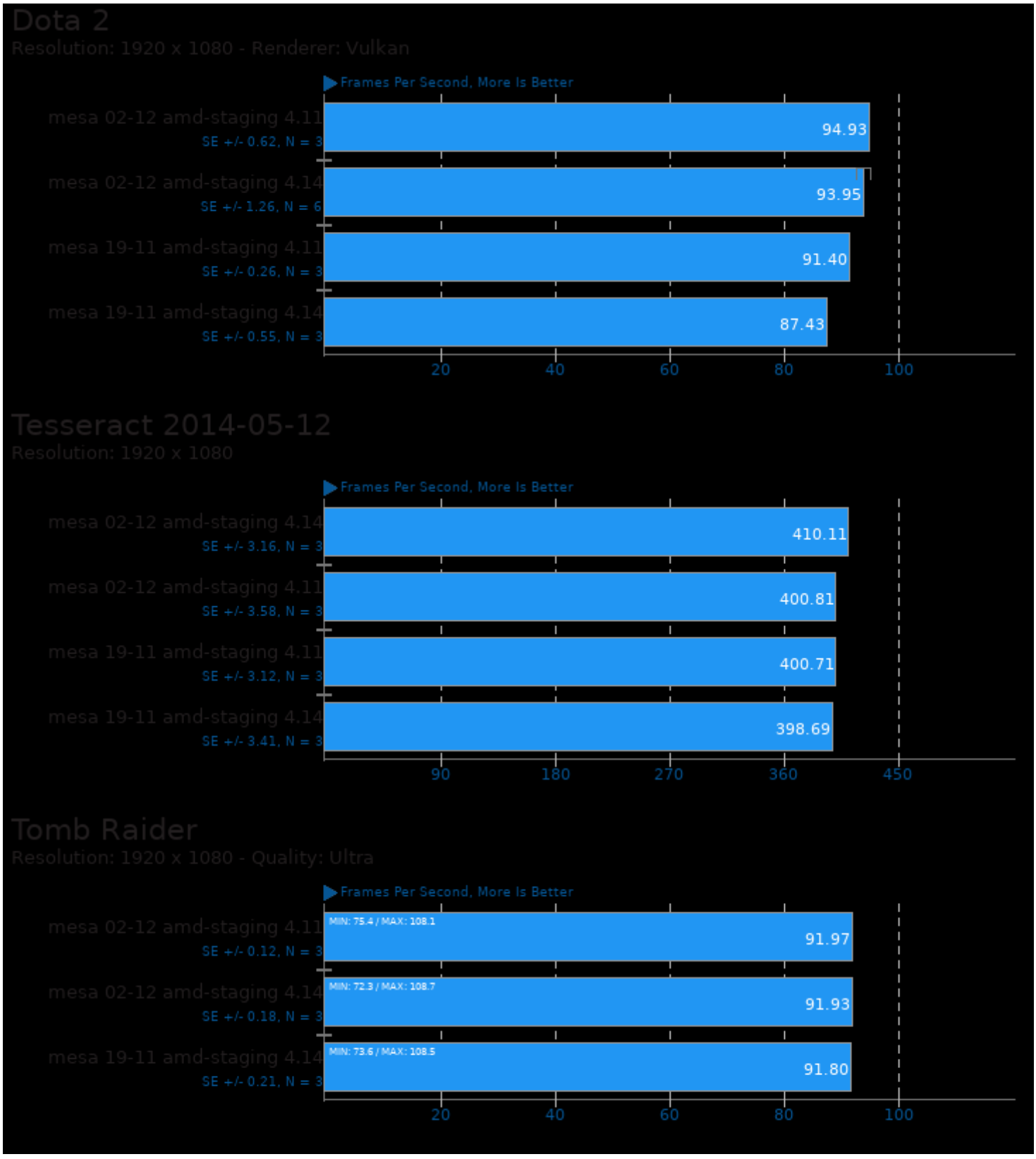
Processor Notes: Scaling Governor: intel_pstate powersave
Graphics Notes: GLAMOR

	mesa 19-11 amd-staging 4.14	mesa 19-11 amd-staging 4.11	mesa 02-12 amd-staging 4.14	mesa 02-12 amd-staging 4.11
DiRT Rally - 1920 x 1080 - Ultra (FPS)	**103.66**	105.36	104.01	**105.87**
Normalized	97.91%	99.52%	98.24%	100%
Standard Deviation	0.2%	0.6%	0.5%	1.1%
DiRT Showdown - 1920 x 1080 - Ultra - 8x MSAA (FPS)	**19.74**	19.77	19.75	**19.78**
Normalized	99.8%	99.95%	99.85%	100%
Standard Deviation	0%	0.1%	0%	0.1%
Dota 2 - 1920 x 1080 - OpenGL (FPS)	**100.80**	101.43	101.97	**102.07**
Normalized	98.76%	99.37%	99.9%	100%
Standard Deviation	0.7%	0.7%	2%	2%
Dota 2 - 1920 x 1080 - Vulkan (FPS)	**87.43**	91.40	93.95	**94.93**
Normalized	92.1%	96.28%	98.97%	100%
Standard Deviation	1.1%	0.5%	3.3%	1.1%
Tesseract - 1920 x 1080 (FPS)	**398.69**	400.71	**410.11**	400.81
Normalized	97.22%	97.71%	100%	97.73%
Standard Deviation	1.5%	1.4%	1.3%	1.5%
Tomb Raider - 1920 x 1080 - Ultra	**91.80**		91.93	**91.97**
Normalized	99.82%		99.96%	100%
Standard Deviation	0.4%		0.3%	0.2%
Unigine Heaven - 1920 x 1080 - Fullscreen (FPS)	**54.22**	55.10	54.61	**55.14**
Normalized	98.33%	99.93%	99.04%	100%
Standard Deviation	0.2%	0.1%	0.1%	0.2%
Unigine Superposition - 1920 x 1080 - Fullscreen - Extreme (FPS)	44.30	**49.10**	**39.90**	49
Normalized	90.22%	100%	81.26%	99.8%
Unigine Valley - 1920 x 1080 - Fullscreen (FPS)	**63.37**	65.55	64.41	**65.57**
Normalized	96.64%	99.97%	98.23%	100%
Standard Deviation	0.1%	0%	0.1%	0.1%

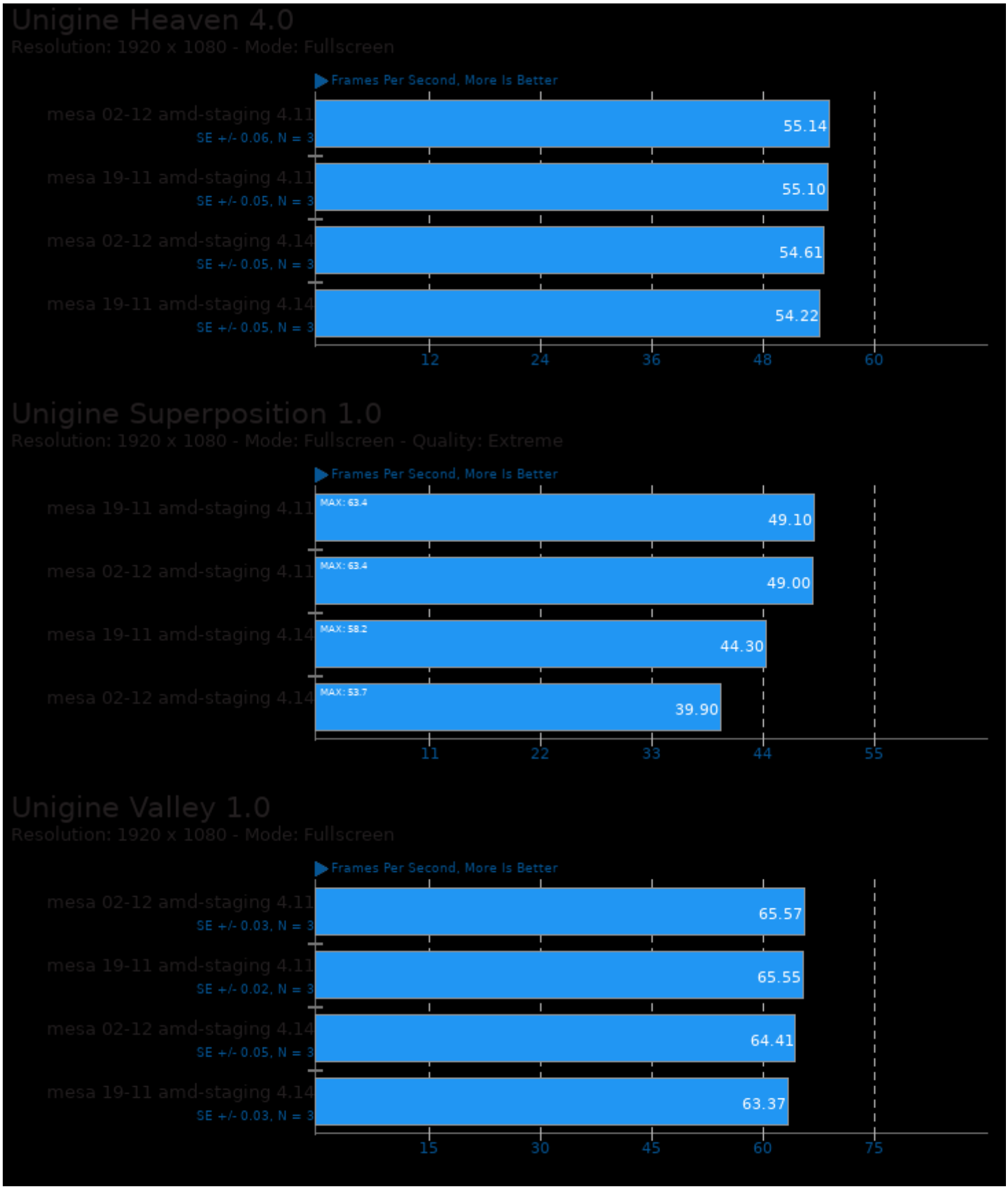
gametest3


DiRT Rally
Resolution: 1920 x 1080 - Graphics Preset: Ultra
Frames Per Second, More Is Better
mesa 02-12 amd-staging 4.11
SE +/- 0.68, N = 3
105.87
mesa 19-11 amd-staging 4.11
SE +/- 0.36, N = 3
105.36
mesa 02-12 amd-staging 4.14
SE +/- 0.30, N = 3
104.01
mesa 19-11 amd-staging 4.14
SE +/- 0.09, N = 3
103.66
20
40
60
80
100
DiRT Showdown
Resolution: 1920 x 1080 - Graphics Preset: Ultra - Multi-Sampling: 8x MSAA
Frames Per Second, More Is Better
mesa 02-12 amd-staging 4.11
SE +/- 0.01, N = 3
MIN: 16.79
19.78
mesa 19-11 amd-staging 4.11
SE +/- 0.01, N = 3
MIN: 16.66
19.77
mesa 02-12 amd-staging 4.14
SE +/- 0.01, N = 3
MIN: 16.73
19.75
mesa 19-11 amd-staging 4.14
SE +/- 0.01, N = 3
MIN: 16.54
19.74
5
10
15
20
25
Dota 2
Resolution: 1920 x 1080 - Renderer: OpenGL
Frames Per Second, More Is Better
mesa 02-12 amd-staging 4.11
SE +/- 1.17, N = 3
102.07
mesa 02-12 amd-staging 4.14
SE +/- 1.17, N = 3
101.97
mesa 19-11 amd-staging 4.11
SE +/- 0.38, N = 3
101.43
mesa 19-11 amd-staging 4.14
SE +/- 0.44, N = 3
100.80
20
40
60
80
100

gametest3

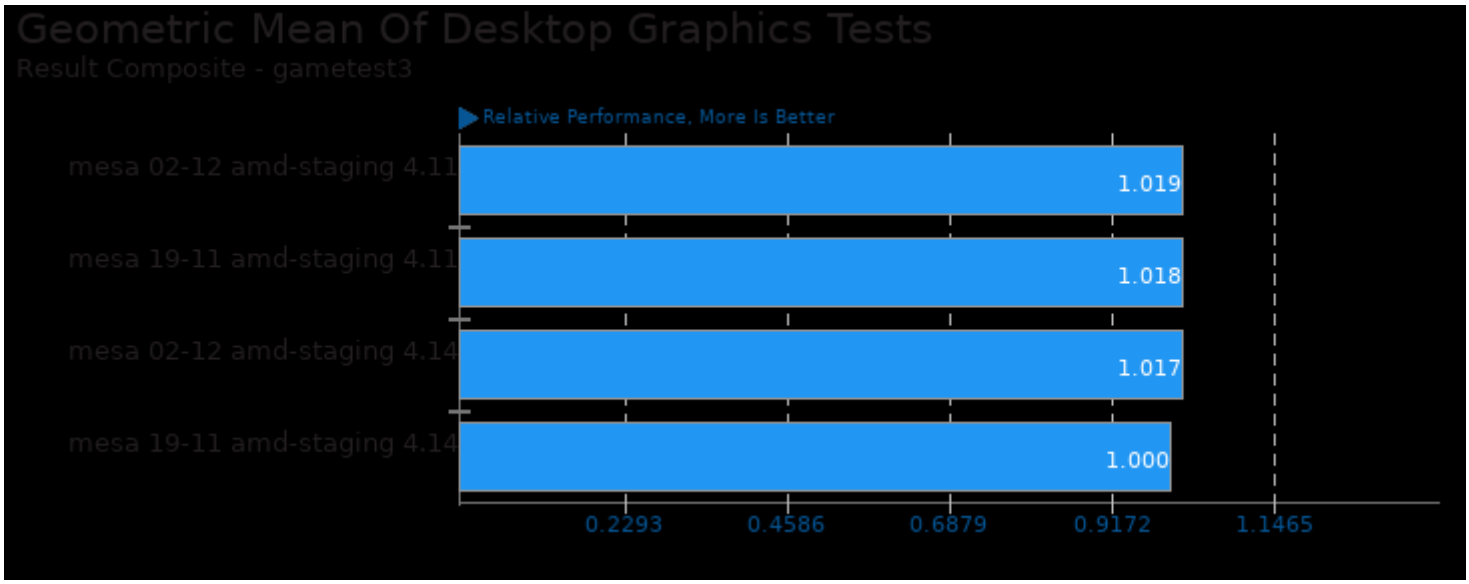

Dota 2
Resolution: 1920 x 1080 - Renderer: Vulkan
Frames Per Second, More Is Better
mesa 02-12 amd-staging 4.11
SE +/- 0.62, N = 3
94.93
mesa 02-12 amd-staging 4.14
SE +/- 1.26, N = 6
93.95
mesa 19-11 amd-staging 4.11
SE +/- 0.26, N = 3
91.40
mesa 19-11 amd-staging 4.14
SE +/- 0.55, N = 3
87.43
20
40
60
80
100
Tesseract 2014-05-12
Resolution: 1920 x 1080
Frames Per Second, More Is Better
mesa 02-12 amd-staging 4.14
SE +/- 3.16, N = 3
410.11
mesa 02-12 amd-staging 4.11
SE +/- 3.58, N = 3
400.81
mesa 19-11 amd-staging 4.11
SE +/- 3.12, N = 3
400.71
mesa 19-11 amd-staging 4.14
SE +/- 3.41, N = 3
398.69
90
180
270
360
450
Tomb Raider
Resolution: 1920 x 1080 - Quality: Ultra
Frames Per Second, More Is Better
mesa 02-12 amd-staging 4.11
SE +/- 0.12, N = 3
MIN: 75.4 / MAX: 108.1
91.97
mesa 02-12 amd-staging 4.14
SE +/- 0.18, N = 3
MIN: 72.3 / MAX: 108.7
91.93
mesa 19-11 amd-staging 4.14
SE +/- 0.21, N = 3
MIN: 73.6 / MAX: 108.5
91.80
20
40
60
80
100

gametest3

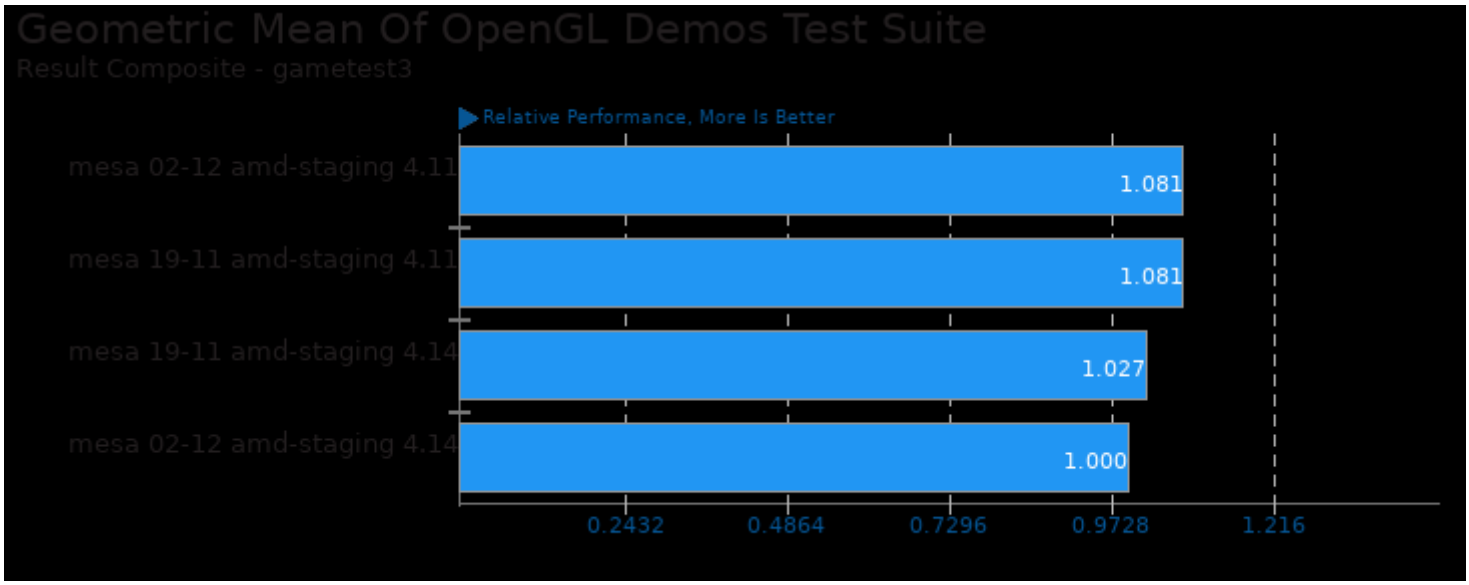

Unigine Heaven 4.0
Resolution: 1920 x 1080 - Mode: Fullscreen
Frames Per Second, More Is Better
mesa 02-12 amd-staging 4.11
SE +/- 0.06, N = 3
55.14
mesa 19-11 amd-staging 4.11
SE +/- 0.05, N = 3
55.10
mesa 02-12 amd-staging 4.14
SE +/- 0.05, N = 3
54.61
mesa 19-11 amd-staging 4.14
SE +/- 0.05, N = 3
54.22
12
24
36
48
60
Unigine Superposition 1.0
Resolution: 1920 x 1080 - Mode: Fullscreen - Quality: Extreme
Frames Per Second, More Is Better
mesa 19-11 amd-staging 4.11
MAX: 63.4
49.10
mesa 02-12 amd-staging 4.11
MAX: 63.4
49.00
mesa 19-11 amd-staging 4.14
MAX: 58.2
44.30
mesa 02-12 amd-staging 4.14
MAX: 53.7
39.90
11
22
33
44
55
Unigine Valley 1.0
Resolution: 1920 x 1080 - Mode: Fullscreen
Frames Per Second, More Is Better
mesa 02-12 amd-staging 4.11
SE +/- 0.03, N = 3
65.57
mesa 19-11 amd-staging 4.11
SE +/- 0.02, N = 3
65.55
mesa 02-12 amd-staging 4.14
SE +/- 0.05, N = 3
64.41
mesa 19-11 amd-staging 4.14
SE +/- 0.03, N = 3
63.37
15
30
45
60
75

gametest3

These geometric means are based upon test groupings / test suites for this result file.

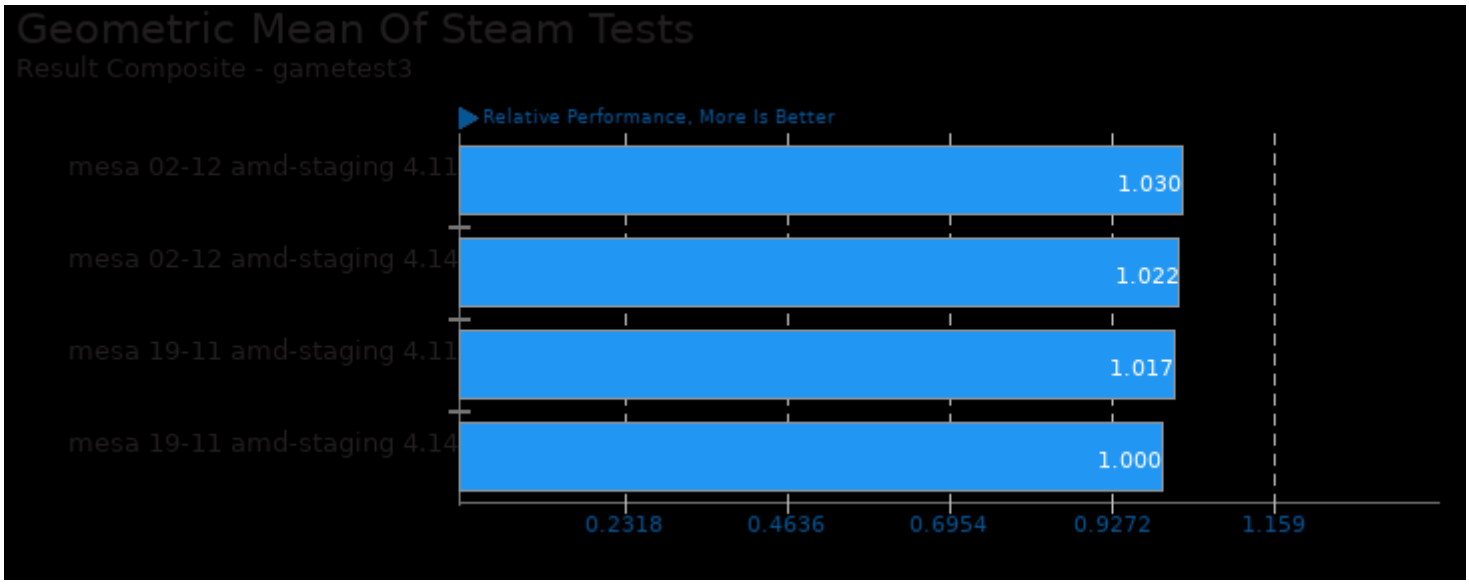


Geometric mean based upon tests: pts/tesseract, pts/unigine-valley and pts/unigine-heaven

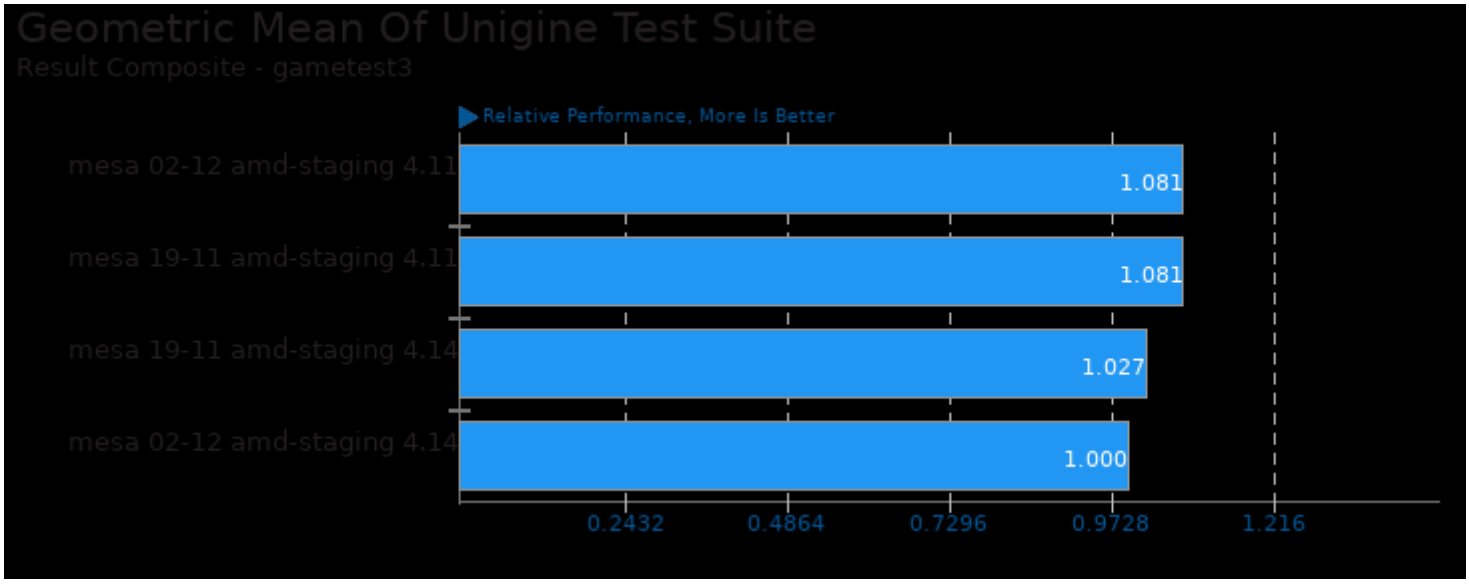


Geometric mean based upon tests: pts/unigine-valley, pts/unigine-heaven and pts/unigine-super

gametest3



Geometric mean based upon tests: pts/dirt-rally, pts/dirt-showdown, pts/dota2 and pts/tomb-raider



Geometric mean based upon tests: pts/unigine-valley, pts/unigine-heaven and pts/unigine-super

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 19:36.